



Translation

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference<br>9247 WO Ho  | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |  |
| International application No.<br>PCT/EP2003/005144   | International filing date (day/month/year)<br>16 May 2003 (16.05.2003)  | Priority date (day/month/year)<br>31 May 2002 (31.05.2002) |
| International Patent Classification (IPC) or national classification and IPC<br>A01B 69/00 |   |  |
| Applicant<br>DEERE & COMPANY   |   |  |

|   |  |
|---|--|
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>1</u> sheets.</p>   |  |
| <p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p> |  |

|   |  |
|---|--|
| Date of submission of the demand<br>10 December 2003 (10.12.2003) | Date of completion of this report<br>30 July 2004 (30.07.2004) |
| Name and mailing address of the IPEA/EP                           | Authorized officer   |
| Facsimile No.   | Telephone No.  |

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/005144

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☒ the description:  
 pages \_\_\_\_\_ 1-16 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_ 4a \_\_\_\_\_, filed with the letter of \_\_\_\_\_ 16 April 2004 (16.04.2004)
- ☒ the claims:  
 pages \_\_\_\_\_ 1-10 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
 pages \_\_\_\_\_ 1/9-9/9 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/EP 03/05144

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

|                               |        |      |     |
|-------------------------------|--------|------|-----|
| Novelty (N)                   | Claims | 1-10 | YES |
|                               | Claims |      | NO  |
| Inventive step (IS)           | Claims | 1-10 | YES |
|                               | Claims |      | NO  |
| Industrial applicability (IA) | Claims | 1-10 | YES |
|                               | Claims |      | NO  |

### 2. Citations and explanations

Reference is made to the following documents:

D1: WO 00/35265

D2: US-A-6148255

D3: US-A-5546093

D4: DE-A-19705842

D5: Patent Abstract JP 04 101206

D1 is considered to be the prior art closest to the subject matter of claim 1 (see page 4, line 15 to page 11, line 22). Said document discloses the preamble of claim 1 and the possibility that the transport vehicle is unmanned (page, lines 23 to 30).

The subject matter of claim 1 therefore differs in that, by means of the control system, the transport vehicle can be driven parallel to the harvester and can be docked onto it.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem addressed by the present invention can therefore be considered that of providing an unmanned and

autonomously travelling transport vehicle which can also receive harvested crops while it is in motion.

The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons:

None of the available documents suggests the features of claim 1 in their entirety. Although D2 discloses two vehicles travelling in parallel, in that document there is no autonomous controller to position the harvester. Furthermore, there is nothing to suggest different types of vehicle and therefore nothing to suggest the receiving and docking function.. D3 does not suggest parallel travel. In D4, a vehicle receiving harvested crops is controlled from a control centre and not by a controller on said vehicle; automatic operation of said vehicle is not therefore possible. D5 does not disclose automatic control in relation to a harvester position, nor does it disclose parallel travel and docking. The subject matter of claim 1 does not therefore inevitably or logically follow from a combination of the prior art.

Claims 2 to 10 are dependent on claim 1 and therefore likewise satisfy the PCT novelty and inventive step requirements.

Industrial applicability is obviously established.